

Remarks

The Office Action mailed November 10, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-18 and 20-29 are now pending in this application of which claims 1, 8, 10, 12, 22, and 29 have been amended. Claim 19 has been cancelled. It is respectfully submitted that the pending claims define allowable subject matter.

The objection to the claims as filed under 37 C.F.R. § 1.126 is acknowledged. Applicants regret any inconvenience associated with the inadvertent misnumbering of the claims in the application as filed. The present amendment includes the corrected claim numbering or original claims 21-30 as claims 20-29, including associated corrections in the dependent claims, as set forth in the attachment to the Office Action.

The objection to claim 19 under 37 C.F.R. § 1.75(c) is respectfully traversed. Claim 19 has been cancelled, and Applicants accordingly request that the objection to claim 19 be withdrawn.

The informal objection to claims 8 and 10 is respectfully traversed. Claims 8 and 10 have been amended to overcome the issues noted in the Office Action. Applicants accordingly request that the objection to claims 8 and 10 be withdrawn.

The objection to the specification is respectfully traversed. The patent number has been corrected in paragraph [0001]. Applicants accordingly request that the objection to the specification be withdrawn.

The objection to claim 1 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Claim 1 has been amended for clarity, and is believed to satisfy Section 112, second paragraph. Applicants accordingly request that the objection to claim 1 be withdrawn.

The rejection of claims 1, 5, 6, 9, 10-12, 15, 17-19, 20, 22, and 25-29 under 35 U.S.C. § 103(a) as being unpatentable over Ogle (U.S. Patent No. 809,978) in view of Darr et al. (U.S. Patent No. 6,373,370) is respectfully traversed.

Ogle describes a safety fuse including an auxiliary fuse coupled to a main fuse (4) and including a coiled tally-fuse (7) at about a middle portion of a fuse shell (2). Tally-fuse (7) is exposed on the outside of shell (2) and covered with a layer of paper (9) saturated in chemicals which render the paper liable to discoloration by heat. A sheet of transparent material (10) covers paper (9) and is retained in place by a strip of paper (11) surrounding shell (2) and including an opening (12) to expose chemical paper (9). Ogle lines 39 to 62. When main fuse (4) is blown, the auxiliary fuse and tally fuse (7) are also blown, thus charring or discoloring paper (9) to indicate that the fuse has blown. Ogle line 86 to line 90. The Office Action asserts that Ogle teaches a backing layer, but inspection of the Ogle reference reveals that reference number (8), which the Office Action equates with a backing layer, actually refers to a recess in the fuse shell. See Ogle lines 51-53. The recess (8) is formed in the shell or body (2) of the fuse, and the shell (2) is not a backing layer corresponding to the backing layer of the present invention. Applicants note that each of the pending independent claims separately recites the body of the fuse and the backing layer of the indicator, a distinction which appears to be ignored in the Office Action.

Ogle therefore describes a chemically treated paper that is discolored by heat when the auxiliary fuse, together with the tally fuse, has opened. As such, the chemically treated paper is not combusted, ignited, or consumed when the fuse is operated, but rather is charred or discolored to another state that is noticeably different in color to indicate the state of the main fuse.

Darr et al. describe a combustible fuse state indicator including a conductive indicating layer which vaporizes to reveal a backing layer when a secondary fuse link opens. The

conductive layer is a sputtered metal, and as such is neither fairly characterized as combustible or ignitable.

Each of independent claims 1, 12, 22 and 29 has been amended for clarity to recite that the combustible substance is readily combustible, ignitable and consumed when the secondary link opens or after the primary fuse element opens. It is respectfully submitted that Ogle in view of Darr et al. fail to teach or suggest a readily combustible, ignitable or consumable substance as these claims recite. Ogle teaches a chemically treated paper that is charred or discolored by heat, but which is not ignited, combusted or consumed. Darr et al. teach a conductive and metallic indication layer that is neither ignited or combusted. Neither of Ogle or Darr et al., separately or in combination, teach or suggest at least the ignitable and combustible recitations of claims 1, 12, 23 and 29. Claims 1, 12, 23, and 29 are therefore submitted to be patentable over Ogle in view of Darr et al.

Claims 2, 6, 9, 10, 11, 15, 17-19, 20, 22 and 25-28 are dependent claims, and when considered in combination with their respective base claims, claims 2, 6, 9, 10, 11, 15, 17-19, 20, 22 and 25-28 are likewise submitted to be patentable over Ogle in view of Darr.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 5, 6, 9, 10-12, 15, 17-19, 20, 22, and 25-29 be withdrawn.

The rejection of Claims 2-4, 13 and 14, and 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Ogle in view of Darr et al., and further in view of Sachs (U.S. Patent No. 737,280) is respectfully traversed.

Sachs describes a fuse having an indicator wire passing through the outer case or body of the fuse, and a portion of the indicator wire extends upon the surface of the case. A label is placed over the indicator wire, and the indicator wire burns the label to provide visual indication of an operated fuse. The Sachs fuse does not include a backing layer that is partially concealed

by a combustible substance or revealed by the combustible substance, or maintaining the indicator wire in position with respect to the label as recited in independent claims 1, 12, and 22. Rather, the indicator wire rests upon the surface of the fuse body or case, and the label overlies the indicator wire, a construction which does not meet the recitations of 1, 12, and 22. Ogle in view of Darr et al., and further in view of Sachs, are not suggestive of claims 1, 12 and 22.

Claims 2-4, 13 and 14, and 23 and 24 are dependent claims of independent claims 1, 12, and 22, and when considered in combination with their respective base claims, claims 2-4, 13 and 14, and 23 and 24 are likewise submitted to be patentable over Ogle in view of Darr.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 2-4, 13 and 14, and 23 and 24 be withdrawn.

The rejection of Claims 7 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Ogle in view of Darr et al., and further in view of Oh (U.S. Patent No. 5,418,516) is respectfully traversed.

Claims 7 and 21 depend from independent claims 1 and 12, respectively, which are submitted to be patentable over Ogle in view of Darr et al. for the reasons set forth above. Oh adds nothing to the teaching of Ogle and Darr et al. with respect to the present invention, and specifically does not describe or suggest a combustible substance in a fuse state indicator. Claims 1 and 12 are therefore submitted to be patentable over Ogle in view of Darr et al. and further in view of Oh, and when the recitations of claims 7 and 21 are considered in combination with the recitations of claims 1 and 12, claims 7 and 21 are likewise submitted to be patentable over Ogle in view of Darr et al. and further in view of Oh.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 7 and 21 be withdrawn.

The rejection of Claims 1, 8, 12 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Ogle in view of Darr et al. is respectfully traversed.

Claims 1 and 12 are submitted to be patentable over Ogle in view of Darr et al. for the reasons set forth above, and when claims 8 and 16 are considered in combination with the recitations of claims 1 and 12, respectively, claims 8 and 16 are likewise submitted to be patentable over Ogle in view of Darr et al.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 8, 12 and 16 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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